Facility Name: **GS II (dba Certainteed Peachtree City)**
City: Peachtree City
County: Fayette
AIRS #: 04-13-113-00013 Application #: TV-609127

Date SIP Application Received: N/A
Date Title V Application Received: November 23, 2021
Permit No: 2952-113-0013-V-04-1

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Introduction

This narrative is being provided to assist the reader in understanding the content of the referenced SIP permit to construct and draft operating permit amendment. Complex issues and unusual items are explained in simpler terms and/or greater detail than is sometimes possible in the actual permit. This permit is being issued pursuant to: (1) Sections 391-3-1-.03(1) and 391-3-1-.03(10) of the Georgia Rules for Air Quality Control, (2) Part 70 of Chapter I of Title 40 of the Code of Federal Regulations, and (3) Title V of the Clean Air Act Amendments of 1990. The following narrative is designed to accompany the draft permit and is presented in the same general order as the permit. This narrative is intended only as an adjunct for the reviewer and has no legal standing. Any revisions made to the permit in response to comments received during the public comment period and EPA review process will be described in an addendum to this narrative.

I. Facility Description

A. Existing Permits

Table 1 below lists the current Title V permit, and all administrative amendments, minor and significant modifications to that permit, and 502(b)(10) attachments.

Table 1: Current Title V Permit and Amendments (Owner

Permit/Amendment Number	Date of Issuance	Description
2952-113-0013-V-04-0	February 20, 2018	Title V Renewal permit (Ownership change)

B. Regulatory Status

1. PSD/NSR/RACT

The facility is located in Atlanta, which based on the *National Ambient Air Quality Standards* (NAAQS) is classified as non-attainment for Ozone. It is under the *New Source Review* (NSR) regulation because its potential to emit VOC is greater than 25 tons.

2. Title V Major Source Status by Pollutant

Table 2: Title V Major Source Status

Pollutant	Is the Pollutant Emitted?	If emitted, what is the facility's Title V status for the Pollutant?		
		Major Source Status	Major Source Requesting SM Status	Non-Major Source Status
PM	✓			✓
PM_{10}	✓			✓
$PM_{2.5}$	✓			✓
SO_2	✓			✓
VOC	✓	✓		
NO_x	✓			✓
CO	✓			✓
TRS	✓			✓
H_2S	✓			✓
Individual HAP	✓			✓
Total HAPs	✓			✓

II. Proposed Modification

A. Description of Modification

CertainTeed is proposing to construct a new roofing line as well as an associated regenerative thermal oxidizer (RTO) to provide additional Volatile Organic Compound (VOC) and Hazardous Air Pollutant (HAP) emissions control. Upon startup of the new line, CertainTeed will shut down the existing line. New storage tanks and vessels are also proposed as part of this expansion. The production/throughput of asphalt shingles/roofing products will increase as part of the expansion.

B. Emissions Change

Note that RTO has resulted a big decrease in VOC and HAPs emission from the facility despite the increased production. There is a significant increase in NOx and CO emission due to the increased production. There is also modest increase in PM emission after the proposed change.

Table 3: Emissions Change Due to Modification

Pollutant	Is the Pollutant Emitted?	Net Actual Emissions Increase (Decrease) (tpy)	Net Potential Emissions Increase (Decrease) (tpy)
PM	✓	4.4	4.4
PM_{10}	✓	9.6	9.6
$PM_{2.5}$	✓	9.6	9.6
SO_2	✓	3.9	3.9
VOC	✓	(137)	(137)
NO_x	✓	24.5	24.5
CO	✓	29	29
Individual HAP	✓	-	-
Total HAPs	✓	(9.2)	(9.2)

C. PSD/NSR Applicability

The proposed project net emission increases will not exceed the NNSR major modification thresholds of 40 tpy of NO_X or VOC. Therefore, ozone NNSR permitting will not be required for the proposed project. As previously discussed, the Peachtree City Plant will remain a minor source with respect to the PSD permitting program. The proposed project's net emissions increase (potential emissions from the new production lines) is summarized in

Table .

Table 1. Project Emissions Increase

Pollutant	Baseline Actual Emissions (tpy)	PTE & Projected Actual Total Emissions (tpy)	Project Emissions Increase (tpy)	NAA NSR Threshold (tpy)	Exceed?
TSP (non-fugitive)	21.79	62.39	40.60	250	No
PM10 (non-fugitive)	21.79	62.39	40.60	250	No
$PM_{2.5}$ (non-fugitive)	21.79	62.39	40.60	250	No
SO2	1.63	8.89	7.26	250	No
NOx	12.93	37.52	24.59	40	No
VOC	46.29	19.43	-26.86	40	No
CO	11.96	55.00	43.03	250	No

At the completion of the proposed project, the Peachtree City Plant will become a minor source with respect to the NNSR program.

III. Facility Wide Requirements

The proposed expansion of the facility (Peachtree City Plant) will not result in any change to the existing facilitywide requirements.

IV. Regulated Equipment Requirements

A. Brief Process Description

Raw materials are delivered to the Peachtree City Plant via truck and rail. Filler, parting agents, and surfacing materials are stored in silos, bins, and bags. Silos and bins are vented to dust collectors. Coating is processed by mixing coating asphalt and filler. Filler is transported from a storage silo to a use bin. Filler is then heated in the filler heater and stored in a use bin. The filler heater is vented to a dust collector. Coating asphalt is pumped through a process heater to a mixing device where it is combined with filler from the hot use bin to make coating. Coating is pumped to the coater, which is vented through the RTO. Coating asphalt is stored hot in tanks. Temperatures are maintained in insulated tanks by a combination of circulation through a process heater and other auxiliary heating systems. Coating is transferred to the coater during roofing material processing.

The manufacture of roofing products is a continuous process. A “mat”, such as a fiberglass mat, is covered with hot coating in the coater, which vents to an RTO. Surfacing materials are applied to the coated mat in the material surfacing area. This area is vented to a high efficiency aerosol filtration (HEAF) system and then to the RTO. The material temperature is reduced in the cooling section, which is vented through a collection hood. Sealant and laminate asphalts are applied to the sheet via separate applicators. Sealant and laminate asphalts are received as hot liquids via truck into insulated tanks that are vented to the RTO. Temperature in the tanks is maintained by means of hot oil coils.

The finished product is cut to the appropriate dimensions and packaged. The packaging process includes wrapping the products in a polyethylene wrapper heated with hot air for shrink fit. Production information is printed on the wrappers. The product is stored for shipment and then transported off-site by truck or rail car.

If the plant is idled for significant durations due to market conditions for the industry or major maintenance event, all equipment and control devices will be shut down, with the exception of the sealant storage tank, laminate storage tank, and three asphalt coating storage tanks. The five (5) tanks remaining "operational" during idled plant periods due to the material content will be controlled by the mist eliminator in the operating scenario.

B. Equipment List for the Process

Note that the equipment ID and control device ID has changed for all existing sources except the emergency fire pump. The bolded sources are the new sources added in this permit amendment.

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	**Description**	**Applicable Requirements/Standards**	**Corresponding Permit Conditions**	**ID No.**	**Description**
Granule and Sand System					
GRU, GTU	Granule Unloading	391-3-1-.02(2)(e)	3.4.2 5.2.5		
FSA, FSB	Filler Storage Silos	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.4.1 3.4.2 5.2.3, 5.2.4, 6.1.7	FSDC	Filler Storage Dust Collector
FCB	Filler Cold Bin	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.4.1 3.4.2 5.2.3, 5.2.4, 6.1.7	CBDC	Cold Bin Dust Collector
FHB	Filler Hot Bin	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.4.1 3.4.2 5.2.3, 5.2.4, 6.1.7	FHDC	Filler Heater Dust Collector
SB	**Sand Application Bin**	**391-3-1-.02(2)(b) 391-3-1-.02(2)(e)**	**3.4.1 3.4.2 5.2.3, 5.2.4, 6.1.7**	**RTO/RTOBP**	**RTO & Kimre Fume Collector**
GS	Granule Silos (31)	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.4.1 3.4.2 5.2.5, 6.1.7		
SSA	Sand Silo A	40 CFR 60 Subpart UU 391-3-1-.02(2)(e)	3.3.1 3.4.2 5.2.3, 5.2.4, 5.2.6 6.1.7, 6.2.1	SSDC	Sand Silo Dust Collector
SSB	**Sand Silo B**				
SURF	Granule Application Area (surfacing)	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.4.2 3.4.2 5.2.3, 5.2.4, 6.1.7	HEAF/RTO/RTOBP	High Efficiency Aerosol Filtration & RTO & Kimre Fume Collector
Storage Tanks					
CTA	Asphalt Coating Storage Tank 1 (48,000 gallons)	391-3-1-.02(2)(tt) 40 CFR 60 Subpart UU 391-3-1-.02(2)(vv)	3.2.2 3.3.1 3.4.5 5.2.1, 5.2.2, 5.2.6 5.2.8, 6.1.7, 6.2.1	RTO/RTOBP	RTO & Kimre Fume Collector
ST	Sealant Storage Tank (10,000 gallons)	391-3-1-.02(2)(tt) 40 CFR 60 Subpart UU 391-3-1-.02(2)(vv)	3.2.2 3.3.1 3.4.5 5.2.3, 5.2.4, 5.2.6 5.2.8, 6.1.7, 6.2.1	RTO/RTOBP	RTO & Kimre Fume Collector

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	**Description**	**Applicable Requirements/Standards**	**Corresponding Permit Conditions**	**ID No.**	**Description**
SDT	Sealant Day Tank (300 gallons)	391-3-1-.02(2)(tt) 40 CFR 60 Subpart UU 391-3-1-.02(2)(vv)	3.2.2 3.3.1 3.4.5 5.2.3, 5.2.4, 5.2.6 5.2.8, 6.1.7, 6.2.1	RTO/RTOBP	RTO & Kimre Fume Collector
SLT	**Seal/Lam Storage Tank**				
SUT	**Sealant Use Tank**				
LT	Laminate Storage Tank	391-3-1-.02(2)(tt) 391-3-1-.02(2)(e) 391-3-1-.02(2)(vv)	3.2.2 3.4.2 3.4.5 5.2.3, 5.2.4, 5.2.8 6.1.7	RTO/RTOBP	RTO & Kimre Fume Collector
LDT	Laminate Day Tank	391-3-1-.02(2)(tt) 391-3-1-.02(2)(e)	3.2.2 3.4.2 5.2.3, 5.2.4, 5.2.8 6.1.7	RTO/RTOBP	RTO & Kimre Fume Collector
PCDT	**Precoater Day Tank**				
LUT	**Laminate Use Tank**				
LA	Laminate Applicator				
Fuel Burning Equipment					
HOH1	Hot Oil Heater # 1 (16 MMBTU/hr)	391-3-1-.02(2)(d) 391-3-1-.02(2)(g)	3.4.3 3.4.4 5.2.5, 5.2.8, 6.2.2		
HOH2	Hot Oil Heater # 2 (12 MMBTU/hr)				
EFP	Diesel Fire Pump	40 CFR 63 Subpart ZZZZ 391-3-1-.02(2)(d) 391-3-1-.02(2)(g)	3.3.3 3.4.3 3.4.4 5.2.5, 5.2.8, 6.1.7 6.2.4		
IRB	**IR Burner**	**391-3-1-.02(2)(g)**		**DMLDC**	**DML/IR Dust Collector**
FHB	**Filler Heater Burner (14 MMBTU/hr)**	**391-3-1-.02(2)(g)**			
Coater					
FCHM	Horizontal Mixer	391-3-1-.02(2)(tt) 391-3-1-.02(2)(e)	3.2.2 3.4.2 5.2.1, 5.2.2, 5.2.8 6.1.7, 6.2.2	RTO/RTOBP	RTO & Kimre Fume Collector
FCVM	Vertical Mixer				
FCC	Coater	391-3-1-.02(2)(tt) 40 CFR 60 Subpart UU 40 CFR 63 Subpart AAAAAAA	3.2.2 3.3.1 3.3.2 4.2.1, 4.2.2, 5.2.1 5.2.2, 5.2.6, 5.2.7 5.2.8, 6.1.7, 6.2.1 6.2.2, 6.2.3	RTO/RTOBP	RTO & Kimre Fume Collector
SA	Sealant Applicator	391-3-1-.02(2)(tt) 391-3-1-.02(2)(e)	3.2.2 3.4.2 5.2.3, 5.2.4, 5.2.8 6.1.7	RTO/RTOBP	RTO & Kimre Fume Collector
COOL	Cooling Section	391-3-1-.02(2)(tt) 391-3-1-.02(2)(e)	3.2.2 3.4.2 5.2.5, 5.2.8, 6.1.7		
CTB	Asphalt Coating Storage Tank 2 (24,000 gallons)	391-3-1-.02(2)(tt) 40 CFR 60 Subpart UU 391-3-1-.02(2)(vv)	3.2.2, 3.2.3, 3.3.1, 3.4.5, 5.2.1, 5.2.2,5.2.6, 5.2.8, 5.2.9,6.1.7, 6.1.9, 6.2.1	RTO/RTOBP	RTO & Kimre Fume Collector
CTC	**Coating Storage Tank C**	**391-3-1-.02(2)(tt) 40 CFR 60 Subpart UU 391-3-1-.02(2)(vv)**	**3.2.2, 3.2.3, 3.3.1, 3.4.5, 5.2.1, 5.2.2,5.2.6, 5.2.8, 5.2.9,6.1.7, 6.1.9, 6.2.1**	**RTO/RTOBP**	**RTO & Kimre Fume Collector**

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
CU	Coating Unload	391-3-1-.02(2)(e)	3.4.2 5.2.5		
SLU	Seal/Lam Unload	391-3-1-.02(2)(e)	3.4.2 5.2.5		

* Generally applicable requirements contained in this permit may also apply to emission units listed above. The lists of applicable requirements/standards and corresponding permit conditions are intended as a compliance tool and may not be definitive.

C. Equipment & Rule Applicability

Emission and Operating Caps –

There is no change to the existing emission and operating caps due to this permit amendment.

Applicable Rules and Regulations -

There is no change to currently applicable rules and regulations caused by the new production line.

D. Permit Conditions

In Condition 3.2.3 the source ID of the asphalt coating storage tanks reflects the new source ID in the permit application.

New Condition 3.2.4 requires the Permittee to operate the new RTO at or above 1500 °F until new performance tests establish a new minimum RTO operating temperature.

New Condition 3.2.5 requires the Permittee to decommission/cease operating the existing production line after startup and normal operations start on the new production line and notify EPD within 15 days after shutdown of the existing production line for the purpose of PSD avoidance.

VI. Monitoring Requirements (with Associated Record Keeping and Reporting)

In existing Condition 5.2.1 the control device ID has been changed to reflect the new RTO for controlling VOC and HAPs emissions. Language has been added for the continuous temperature monitoring of the RTO temperature.

In Conditions 5.2.2 and 5.2.3 the control device ID is updated to the new RTO and Kimre Fume Collector.

New Condition 5.2.10 describes the Preventive Maintenance Program (PMP) for the new RTO.

VII. Other Record Keeping and Reporting Requirements

Condition 6.1.7.c.v requires the Permittee to report any excursion of the RTO temperature.

VIII. Specific Requirements

Discuss any of the following specific requirements as they apply to the modification.

A. Operational Flexibility

None requested in this permit amendment.

B. Alternative Requirements

None.

C. Insignificant Activities

Not applicable.

D. Temporary Sources

No temporary sources were proposed in this permit amendment application.

E. Short-Term Activities

Not applicable.

F. Compliance Schedule/Progress Reports

None.

G. Emissions Trading

Not applicable.

H. Acid Rain Requirements/CAIR/CSPAR

Not applicable.

I. Prevention of Accidental Releases

Not applicable.

J. Stratospheric Ozone Protection Requirements

Not applicable.

K. Pollution Prevention

Not applicable.

L. Specific Conditions

None.

Addendum to Narrative

The 30-day public review started on month day, year and ended on month day, year. Comments were/were not received by the Division.

//If comments were received, state the commenter, the date the comments were received in the above paragraph. All explanations of any changes should be addressed below.//